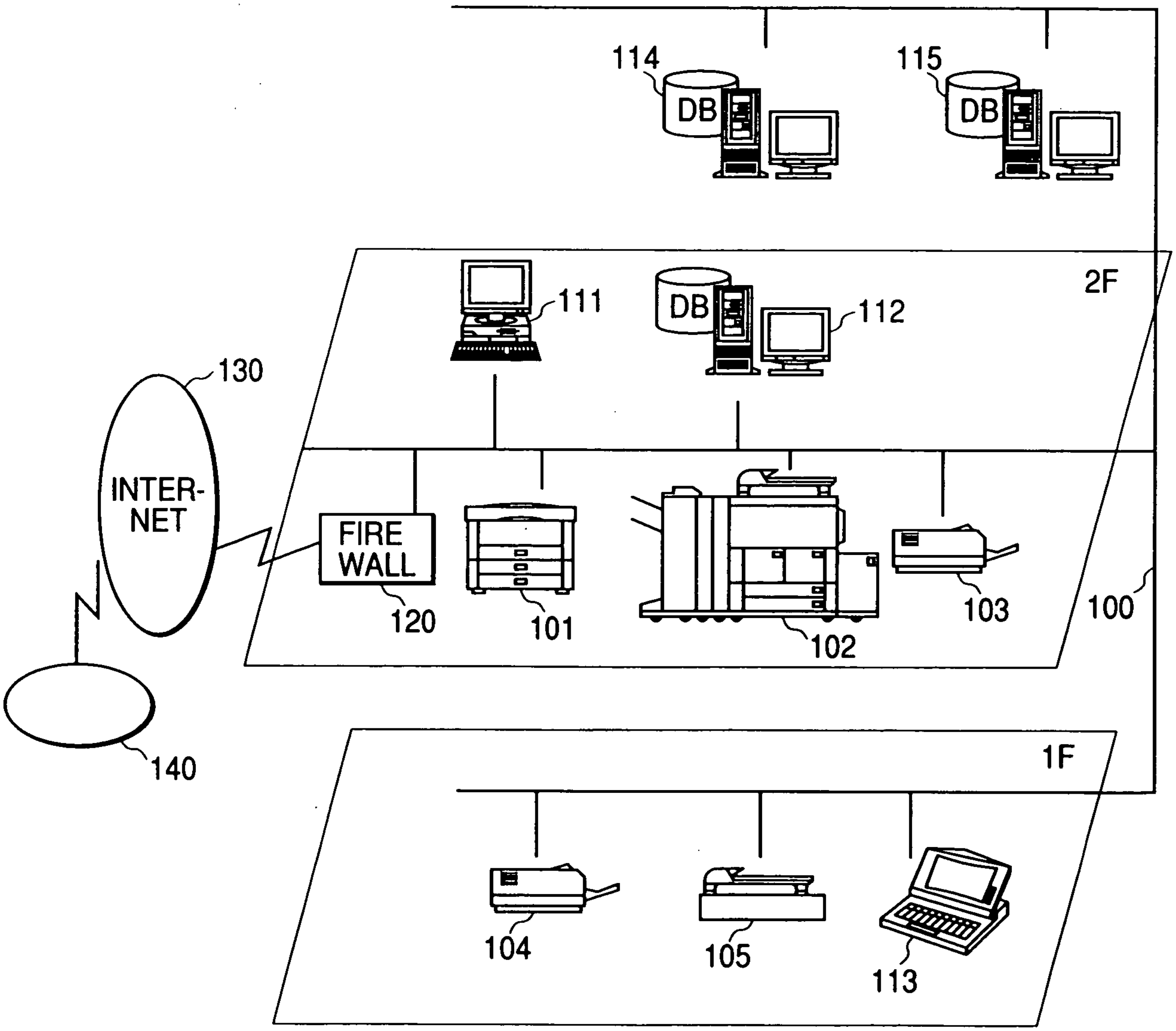
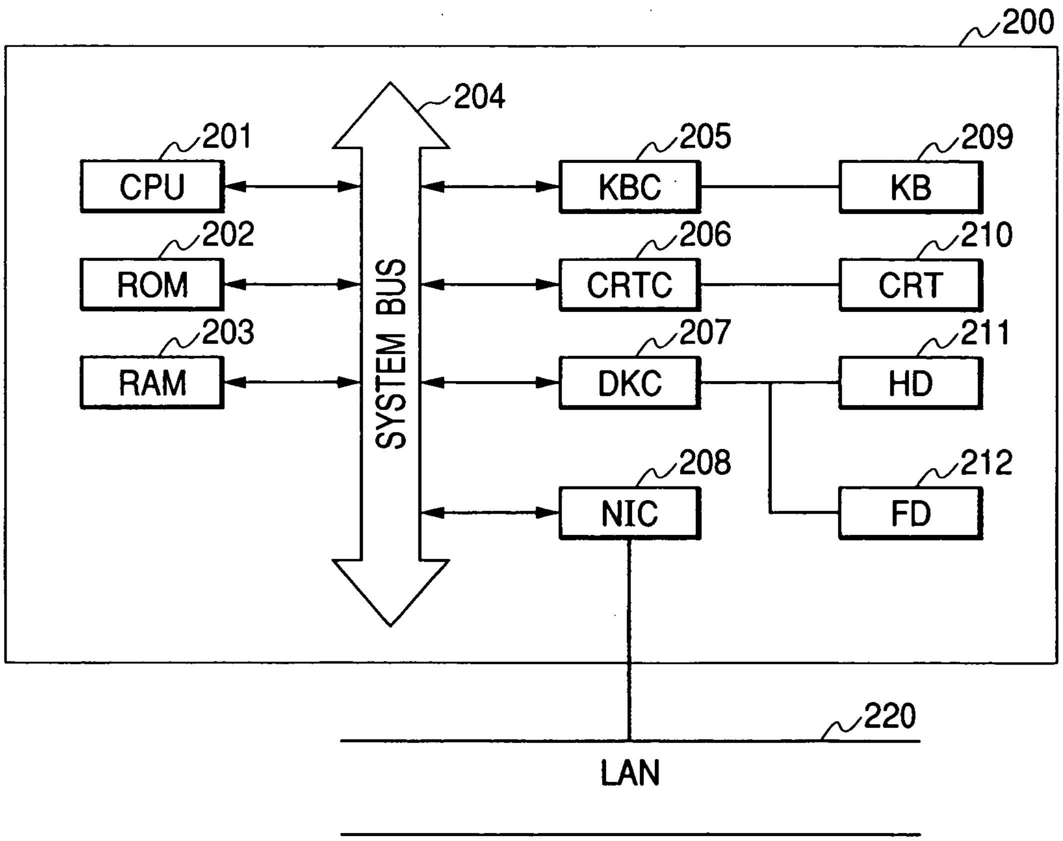
09577624 . 052400

FIG. 1



APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

FIG. 2



09579245.052400

09576245.052400

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

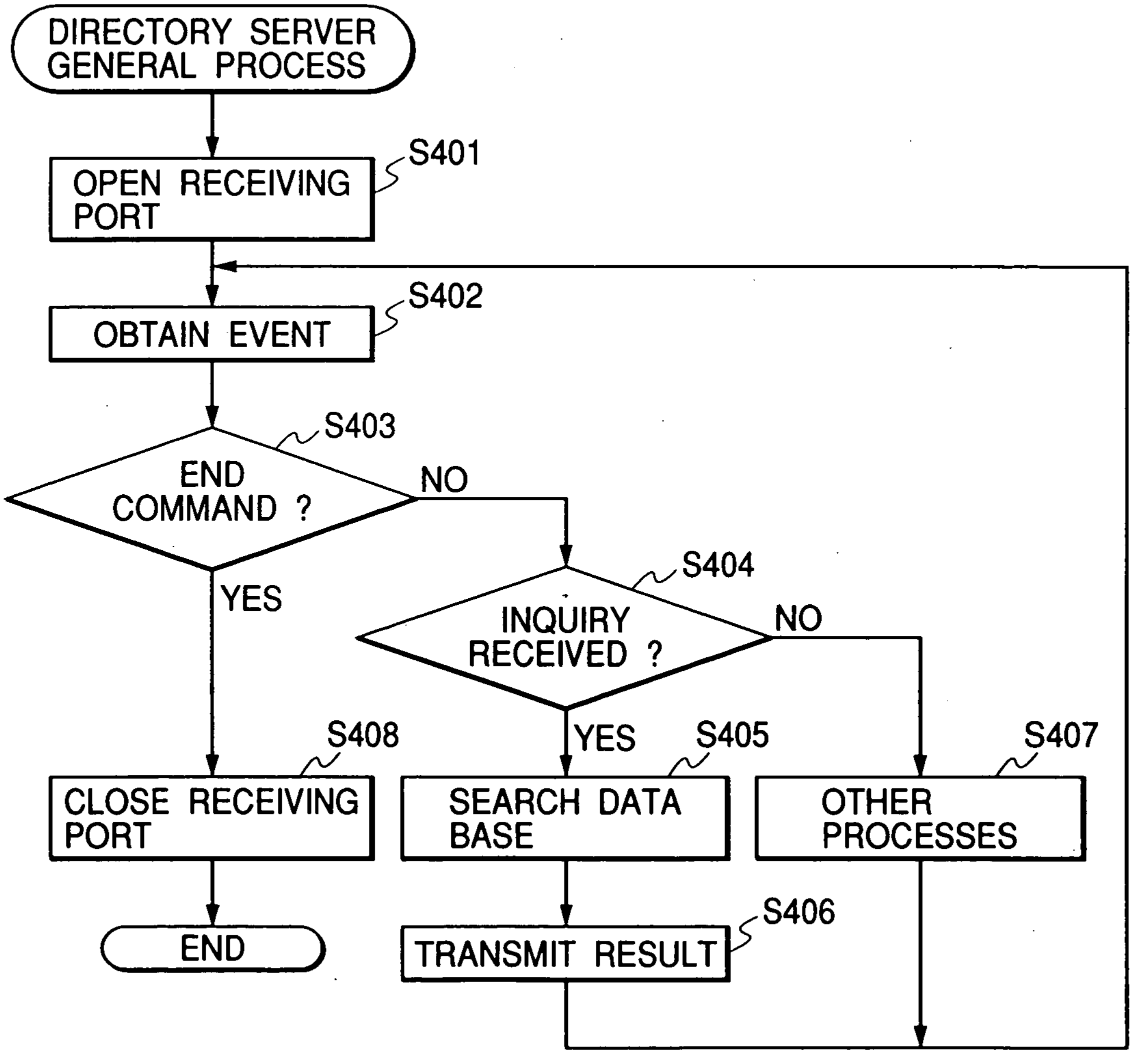
FIG. 3

DIRECTORY REGISTER INFORMATION 300

301 DEVICE NAME	302 NETWORK ADDRESS	303 OBJECT CLASS	304 DEVICE TYPE	305 COLOR	306 DOUBLE-SIDED PRINT	307 STAPLE
Mr. COLOR	192.168.16.131	printer	printer	1	0	1
SECOND FLOOR HIGH SPEED MACHINE	192.168.16.132	printer	MFP	0	1	1
DEVELOPMENT ROOM PRINTER	192.168.16.155	printer	printer	0	0	1
FIRST FLOOR PRINTER	192.168.16.156	printer	printer	0	1	1
SCAN	192.168.16.32	scanner	scanner	NA	NA	NA
...	...	...	...	...	...	...

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

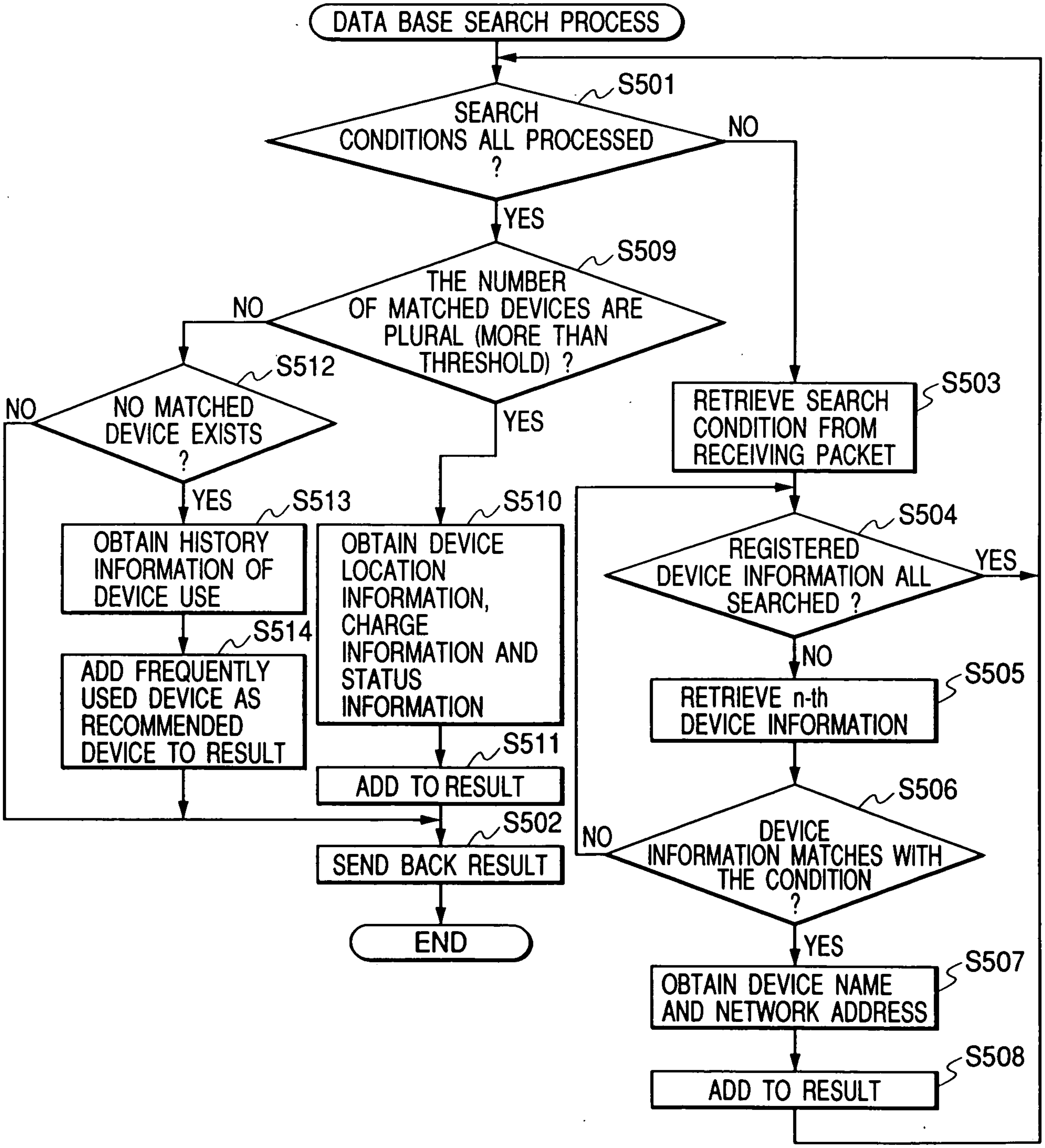
FIG. 4



00425045 .052400

09576245.052400

FIG. 5


DATA BASE SEARCH PROCESS
S501
SEARCH CONDITIONS ALL PROCESSED ?
NO
YES
S509
THE NUMBER OF MATCHED DEVICES ARE PLURAL (MORE THAN THRESHOLD) ?
NO
YES
S512
NO MATCHED DEVICE EXISTS ?
NO
YES
S513
OBTAIN HISTORY INFORMATION OF DEVICE USE
S514
ADD FREQUENTLY USED DEVICE AS RECOMMENDED DEVICE TO RESULT
S510
OBTAIN DEVICE LOCATION INFORMATION, CHARGE INFORMATION AND STATUS INFORMATION
S511
ADD TO RESULT
S502
SEND BACK RESULT
END
S503
RETRIEVE SEARCH CONDITION FROM RECEIVING PACKET
S504
REGISTERED DEVICE INFORMATION ALL SEARCHED ?
YES
NO
S505
RETRIEVE n-th DEVICE INFORMATION
S506
DEVICE INFORMATION MATCHES WITH THE CONDITION ?
NO
YES
S507
OBTAIN DEVICE NAME AND NETWORK ADDRESS
S508
ADD TO RESULT

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

09579245.052400

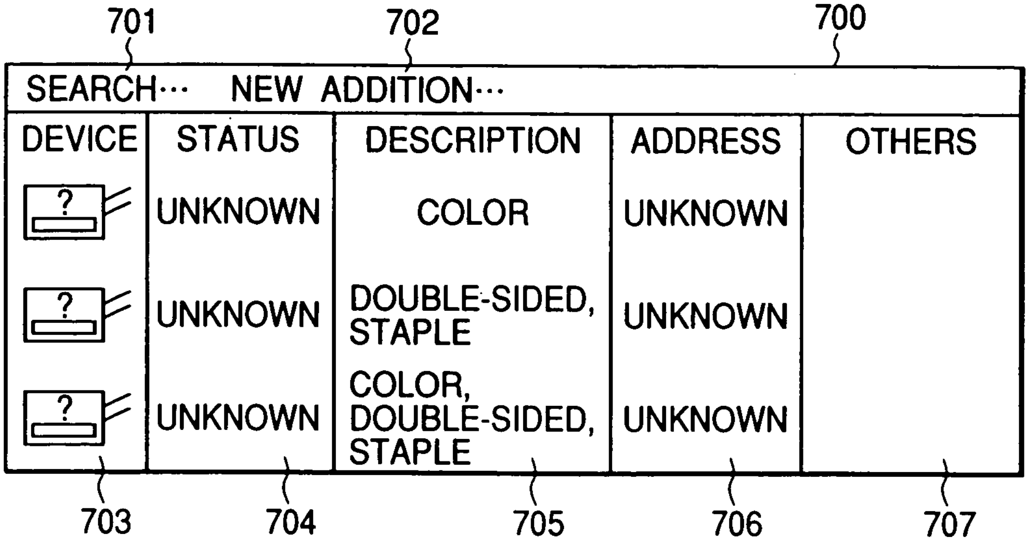
FIG. 6

SEARCH RESULT

CONDITION NAME (601)	DEVICE NAME (602)	NETWORK ADDRESS (603)	DEVICE TYPE (604)
C1	Mr. COLOR	192.168.16.131	printer
C2	SECOND FLOOR HIGH SPEED MACHINE	192.168.16.132	MFP
C3	NULL	NULL	NULL

C1 : objectclass=printerANDcolor
C2 : objectclass=printerANDdouble-sidedANDstaple
C3 : objectclass=printerANDcolorANDdouble-sidedANDstaple

FIG. 7



DEVICE	STATUS	DESCRIPTION	ADDRESS	OTHERS
?	UNKNOWN	COLOR	UNKNOWN	
?	UNKNOWN	DOUBLE-SIDED, STAPLE	UNKNOWN	
?	UNKNOWN	COLOR, DOUBLE-SIDED, STAPLE	UNKNOWN	

09579245.052400

FIG. 8

CONDITION TABLE

802

801

CONDITION NAME	CONDITION FORMULA
C1	(& (objectclass=printer) (color=1)
C2	(& (objectclass=printer) (doubleSided=1) (staple=1))
C3	(& (objectclass=printer) (color=1) (doubleSided=1) (staple=1))

FIG. 10

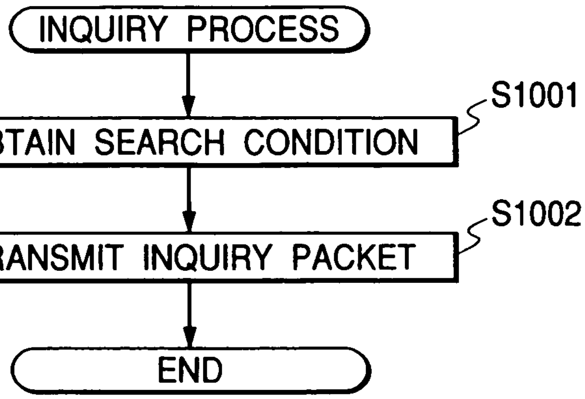
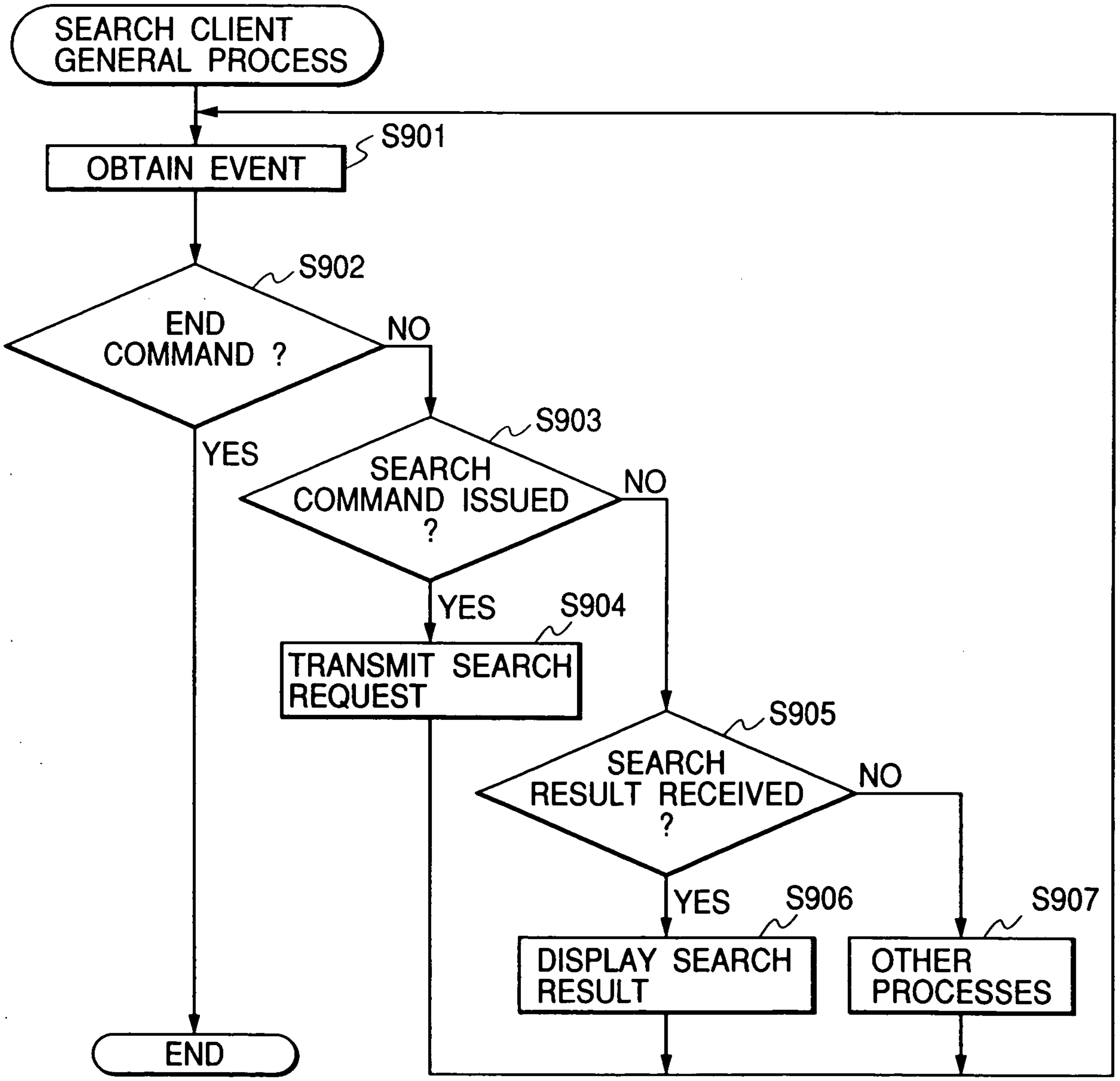
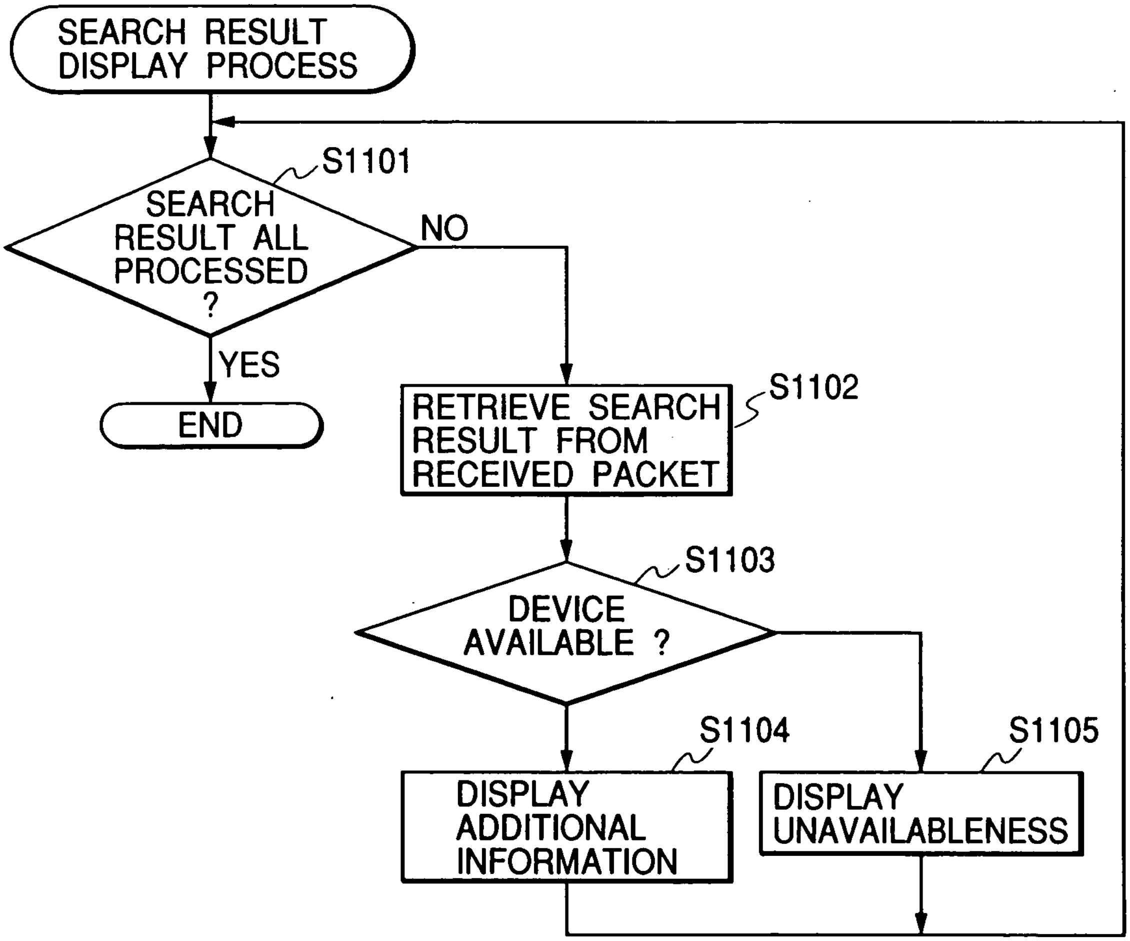


FIG. 9



09576245.052400

FIG. 11

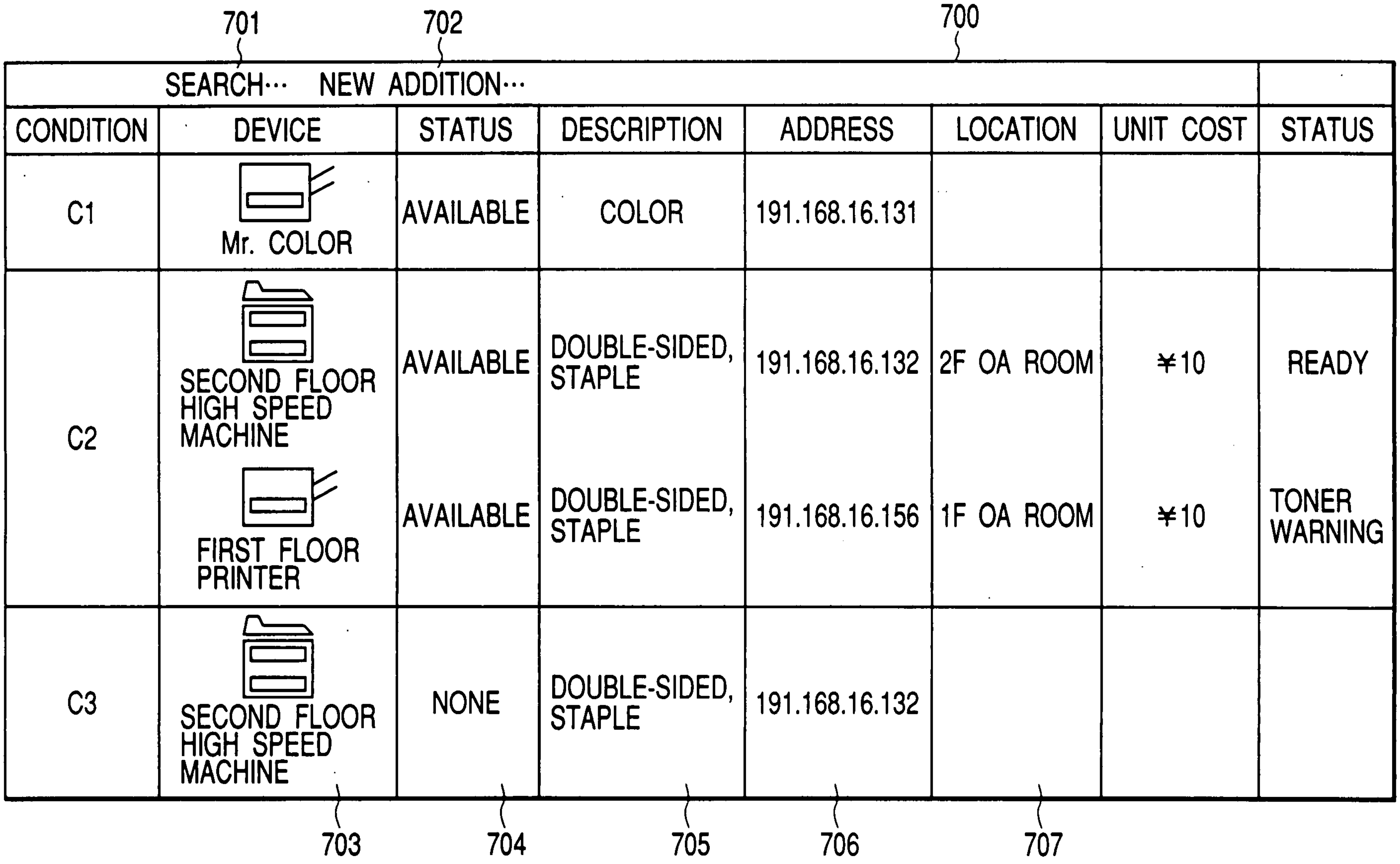

SEARCH RESULT DISPLAY PROCESS
S1101
SEARCH RESULT ALL PROCESSED ?
NO
YES
END
RETRIEVE SEARCH RESULT FROM RECEIVED PACKET
S1102
S1103
DEVICE AVAILABLE ?
S1104
S1105
DISPLAY ADDITIONAL INFORMATION
DISPLAY UNAVAILABLENESS

09576245.052400

09576245.052400

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

FIG. 12



SEARCH··· NEW ADDITION···

CONDITION	DEVICE	STATUS	DESCRIPTION	ADDRESS	LOCATION	UNIT COST	STATUS
C1	Mr. COLOR	AVAILABLE	COLOR	191.168.16.131			
C2	SECOND FLOOR HIGH SPEED MACHINE	AVAILABLE	DOUBLE-SIDED, STAPLE	191.168.16.132	2F OA ROOM	¥10	READY
	FIRST FLOOR PRINTER	AVAILABLE	DOUBLE-SIDED, STAPLE	191.168.16.156	1F OA ROOM	¥10	TONER WARNING
C3	SECOND FLOOR HIGH SPEED MACHINE	NONE	DOUBLE-SIDED, STAPLE	191.168.16.132			

09562924.052400

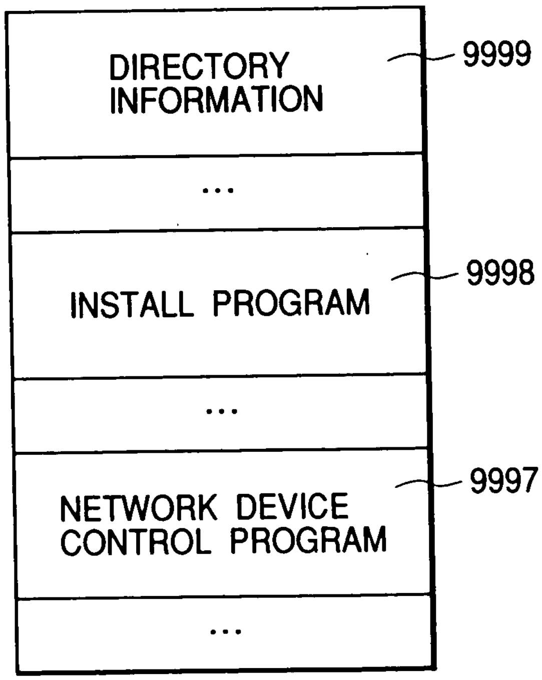
FIG. 13

1301	1302	1303	1304	1305	1306	1307	1308	1309	
DEVICE NAME	NETWORK ADDRESS	OBJECT CLASS	DEVICE TYPE	COLOR	DOUBLE-SIDED PRINT	STAPLE	LOCATION INFORMATION	CHARGE INFORMATION	STATUS
SECOND FLOOR HIGH SPEED MACHINE	192.168.16.132	printer	MFP	0	1	1	SECOND FLOOR OA ROOM	¥10	READY
FIRST FLOOR PRINTER	192.168.16.156	printer	printer	0	1	1	FIRST FLOOR OA ROOM	¥10	TONER WARNING

FIG. 14

MODE		THE NUMBER OF USE
SIZE	A4	1000
	B4	100
	A3	100
COLOR	MONOCHROME	900
	COLOR	300
DOUBLE-SIDED PRINT		200
STAPLE PRINT		100

FIG. 15



09576245 .052400